

good job of summarizing older important concepts and of bringing the reader up to date on current research trends in aneuploidy.

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PHARMACOLOGY AND TOXICOLOGY OF PROTEINS. Edited by John S. Holcenberg and Jeffrey L. Winkelhake. New York, Alan R. Liss, Inc., 1987. 381 pp. \$70.00.

One of the most promising and practical applications resulting from the enormous advances made in the understanding of molecular structure and biology of proteins is in the area of therapeutics and drug development. While recombinantly produced protein and peptide drugs offer the possibility for extremely specific and potent pharmaceuticals for the modulation of biological responses, the toxicology of only a few of these novel agents has been rigorously studied. This collection of papers from a recent UCLA symposium sponsored jointly by Cetus Corporation is devoted primarily to a discussion of the unique problems now being encountered in the analysis of the pharmacokinetics, metabolism, immunogenicity, and toxicology of proteins and peptides. Specifically, the clinical pharmacology of monoclonal antibodies, interleukin-2, interferons, protease inhibitors, and thrombolytics are examined, as well as novel drug delivery systems particularly suited to these experimental therapies.

Unfortunately, this volume, like so many of these hastily edited collections, is a disparate, incohesive, and largely superficial group of descriptive papers. While there are a few valuable contributions, such as the thorough review of monoclonal antibody therapies for infectious diseases, this book suffers most notably from the lack of papers devoted to toxicological testing of gene products (attributed by one speaker to the concurrent Society of Toxicology Meeting!).

The clinical pharmacology of proteins and peptides represents a fascinating and largely uncharted subject, which will undoubtedly gather increased attention from both the medical and scientific communities as new drugs near clinical trials. This volume, however, serves as neither a balanced review nor an appropriate introduction to this subject. Industrial toxicologists may find their colleagues' discussions interesting and somewhat valuable, but the student or clinician interested in protein therapeutics is advised to continue reading the primary literature for now.

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NEURAL PLASTICITY. A LIFESPAN APPROACH. Edited by Ted L. Petit and Gwen O. Ivy. New York, Alan R. Liss, Inc., 1987. 383 pp. \$59.50.

Developmental models have long played a significant role in neurology. Recently, however, there also has been increased interest among biological psychiatrists in the neurodevelopmental processes which regulate the onset, course, and offset of illnesses such as schizophrenia and anxiety disorders. In *Neural Plasticity: A Lifespan Approach*, the thirty-sixth volume in the "Neurology and Neurobiology" series from Alan R. Liss, Inc., leading researchers in the developmental neurosciences review recent progress in three principal areas: (1) early cortical development, (2) transplantation of neural tissue, and (3) senescent developmental changes.